



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0459; Project Identifier MCAI-2021-00266-E]

RIN 2120-AA64

Airworthiness Directives; GE Aviation Czech s.r.o. (Type Certificate Previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.) Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all GE Aviation Czech s.r.o. (GEAC) M601D-11 model turboprop engines. This proposed AD was prompted by the manufacturer revising the airworthiness limitation section (ALS) of the existing engine maintenance manual (EMM) to include a visual inspection of the centrifugal compressor case for cracks. This proposed AD would require revising the ALS of the existing EMM to incorporate a visual inspection of the centrifugal compressor case. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 999; email: tp.ops@ge.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0459; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0459; Project Identifier MCAI-2021-00266-E” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any

personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0060, dated March 3, 2021 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

The airworthiness limitations for certain M601 engine models, which are approved by EASA, are currently defined and published in the ALS. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Recently, GEAC published the ALS, as defined in this [EASA] AD, introducing a visual inspection of the Centrifugal Compressor Case.

For the reason described above, this [EASA] AD requires accomplishment of the actions specified in the ALS.

You may obtain further information by examining the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0459.

FAA's Determination

This product has been approved by EASA and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in the MCAI and service information. The FAA is proposing this AD because the agency evaluated all the relevant information provided by EASA and has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Related Service Information

The FAA reviewed GE Aviation Czech Airworthiness Limitations R18, Section 5. Mandatory Inspections, of the GE Aviation Czech EMM, Part No. 0982309, Revision No. 18, dated December 18, 2020 (Airworthiness Limitations R18, Section 5. Mandatory Inspections). Airworthiness Limitations R18, Section 5. Mandatory Inspections, of the EMM specifies procedures for performing a visual inspection of the centrifugal compressor case for cracks.

Proposed AD Requirements in this NPRM

This proposed AD would require revising the ALS of the existing EMM to incorporate a visual inspection of the centrifugal compressor case for cracks. An owner/operator (pilot) holding at least at least a private pilot certificate may revise the ALS of the existing EMM, and the owner/operator must enter compliance with the applicable paragraphs of the AD into the aircraft records in accordance with 14 CFR 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v). This is an exception to the FAA's standard maintenance regulations.

Differences Between this Proposed AD and the MCAI or Service Information

The MCAI specifies replacing each component before exceeding the applicable life limit and accomplishing all the applicable maintenance tasks within the thresholds and intervals, as defined in the ALS. This proposed AD would require revising the ALS

of the existing EMM to incorporate a visual inspection of the centrifugal compressor case. The MCAI specifies that if discrepancies are found during the accomplishment of the EASA AD, to accomplish corrective actions in accordance with existing GEAC instructions. The MCAI also specifies to contact GEAC for approved instructions if a detected discrepancy cannot be corrected using existing GEAC instruction. This proposed AD would not require performing corrective actions in accordance with existing GEAC instructions or contacting GEAC for approved instructions. The MCAI specifies revising the aircraft maintenance program within 12 months from its effective date. This proposed AD would require revising the ALS of the existing EMM to incorporate a visual inspection of the centrifugal compressor case within 90 days after the effective date of this proposed AD.

The MCAI and GE Aviation Czech Airworthiness Limitations R18, Section 5. Mandatory Inspections, apply to GEAC M601D-1, M601D-2, M601D-11, M601D-11NZ, and M601Z model turboprop engines. This proposed AD would not apply to GEAC M601D-1, M601D-2, M601D-11NZ, and M601Z model turboprop engines because these model turboprop engines do not have an FAA type certificate.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 7 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Revise the ALS of the EMM	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$595

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

GE Aviation Czech s.r.o (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Docket No. FAA-2022-0459; Project Identifier MCAI-2021-00266-E.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. M601D-11 model turboprop engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by the manufacturer revising the airworthiness limitation section (ALS) of the existing engine maintenance manual (EMM) to include a visual inspection of the centrifugal compressor case for cracks. The FAA is issuing this AD to prevent failure of the centrifugal compressor case. The unsafe condition, if not addressed, could result in failure of the centrifugal compressor case, engine separation, and loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 90 days after the effective date of this AD, revise the ALS of the existing EMM by incorporating Figure 1 to paragraph (g)(1) of this AD.

Figure 1 to Paragraph (g)(1) – Visual Inspection of the Centrifugal Compressor Case

5. Mandatory Inspections

5.1 Visual inspection of Centrifugal Compressor Case

Accomplishment Instruction

Do a visual inspection of the compressor case in the specified areas, shown in Figure 1, for every 100 ± 10 Flight Hours. Use magnifying lens 10x for inspection. No visible cracks are allowed.

Equipment:

The following equipment is required and may be obtained as shown:

- A 150-watt standard spotlight or 40-watt high intensity spotlight or alternative (Commercial) to acquire necessary illumination at minimum 1000lux.
- Magnification equipment 10x (Commercial).

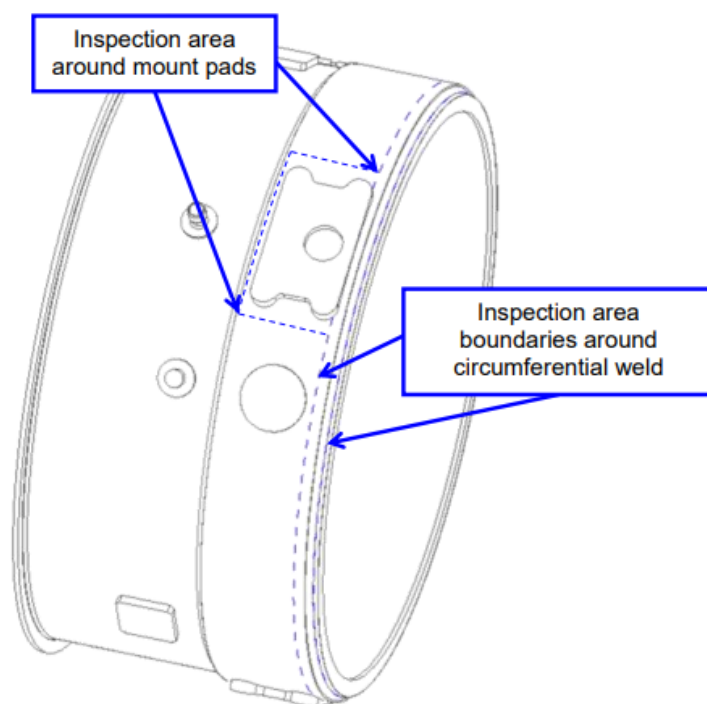


Figure 1. Centrifugal Compressor Case

(2) After revising the ALS of the existing EMM required by paragraph (g)(1) of this AD, no alternative inspection intervals may be used unless they are approved as provided in paragraph (h) of this AD.

(3) The action required by paragraph (g)(1) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ECO Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD and email: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0060, dated March 3, 2021, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2022-0459.

Issued on April 8, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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